

CLAIMS:

1. A trusted display device (1) for, upon being superimposed on an untrusted display (2), reconstructing a graphical message, said device comprising a display screen (1a) having a plurality of independently addressable pixels, and a plurality of sensors (1c) associated with at least a subset of the pixels of said display screen (1a) and arranged such
5 that they, when the displays (1, 2) are superimposed, are able to detect optically encoded information presented by an underlying pixel of the untrusted display (2).
2. The display device of claim 1, wherein said subset of pixels of said display screen (1a) comprises all pixels of said display screen (1a).
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3. The display device of claim 1 or 2, wherein said display device (1) further comprise at least one sensor associated with each pixel of said display screen (1a).
4. The display device of any one of claims 1 to 3, wherein the optically encoded
15 information is in the form of time or amplitude modulated light intensity.
5. The display device of any one of claims 1 to 4, wherein said display device (1) further comprises means for adapting the activation of its pixels based on said information sensed.
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6. The display device of any one of claims 1 to 5, wherein said display screen (1a) is a liquid crystal display screen a first side of which comprise said sensors (1c) and a second side of which is essentially covered by a first polarization filter (1b) and said display device (1) further is arranged to receive upon said sensors (1c) incident light of a first
25 polarization direction.
7. The display device of claim 6, wherein said display device (1) further comprises a key generator, arranged to activate the pixels in accordance with either of a first and a second algorithm based on said information sensed.

8. The display device of claim 7, wherein said first algorithm is used to interpret pixels displaying optically encoded information, and said second algorithm for interpreting other pixels.

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9. The display device of claim 7, wherein said second algorithm is arranged to be used to compute the pixel state when said information indicates that the incident light should be considered to have a polarization direction which is different to said first polarization direction and said first algorithm is used to compute the pixel state otherwise.

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10. The display device of claim 6, wherein said display device (1) further comprise a second polarization filter (1d), essentially covering said first side of said liquid crystal display screen (1a) and arranged to provide upon said sensors (1c) incident light of said first polarization direction.

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11. A method for reconstructing a graphical message on a display screen of a trusted display device said display screen having a plurality of independently addressable pixels and sensors, said method comprising the steps of:

superimposing said display screen of said trusted display device on an
20 untrusted display;
sensing information presented by an underlying pixel of the untrusted display using said sensors;
adapting the activation of the pixels of said display screen of said trusted display device based on said information sensed.

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12. A method according to claim 11, said method further comprising the step of:
operating the untrusted display device as a backlight for the trusted display device once said step of adapting the activation of the pixels of said display screen of said trusted display device has been performed.